

**Application No. : Unknown**  
**Filed : Herewith**

IN THE CLAIMS

1. Please cancel claims 1-45 without prejudice, and add new Claims 46-60 as follows:

5  
46. (New) A distributed application for use on a cable network, comprising:  
at least one server portion disposed on at least one of a plurality of servers of said  
network, said at least one server portion comprising a plurality of modules;  
at least one client portion disposed on at least one of a plurality of client devices of said  
10 network, said at least one client portion comprising at least one module;  
at least one mutable module, said mutable module being adapted to be dynamically  
allocated to either at least one of said plurality of servers or at least one of said plurality of client  
devices;  
wherein said at least one mutable module is adapted to maintain at least one client/server  
15 partition.

47. (New) A distributed application for use on a cable network, comprising:  
at least one server portion disposed on at least one of a plurality of servers of said  
network, said at least one server portion comprising a plurality of modules;  
at least one client portion disposed on at least one of a plurality of client devices of said  
20 network, said at least one client portion comprising at least one module; and  
at least one mutable module, said mutable module being adapted to run on either at least  
one of said plurality of servers or at least one of said plurality of client devices;  
wherein said at least one mutable module is adapted to be substituted for a network  
partition running as a separate thread on said at least one client device.

25 48. (New) The distributed application of Claim 47, wherein said at least one mutable  
object runs in the thread and memory space of a containing object.

49. (New) The distributed application of Claim 47, wherein said at least one  
containing object comprises at least one of a second mutable object or an anchor point.

**Application No. : Unknown**  
**Filed : Herewith**

50. (New) A distributed application for use on a cable network, comprising:  
at least one server portion disposed on at least one of a plurality of servers of said  
network, said at least one server portion comprising a plurality of modules;  
at least one client portion disposed on at least one of a plurality of client devices of said  
5 network, said at least one client portion comprising at least one module;  
at least one mutable module, said mutable module being adapted to be dynamically  
allocated to either at least one of said plurality of servers or at least one of said plurality of client  
devices, and to maintain at least one client/server partition; and  
at least one anchor point.

10 51. (New) A distributed application adapted for operation on a client-server network,  
comprising:  
at least one server portion adapted for operation on at least one server of said network;  
a message protocol configured for interprocess communication;  
at least one client portion adapted for operation on at least one client device of said  
15 network, said at least one client portion being in data communication with said at least one server  
portion using at least said message protocol; and  
at least one mutable module adapted for selective movement from said at least one server  
to said at least one client device, said at least one mutable module comprising at least one vertical  
(client server) partition which is maintained during said selective movement;  
20 wherein said selective movement is determined at least in part on the resources available  
within said at least one client device.

52. (New) A distributed application architecture for use in a client-server network,  
comprising a distributed application having a plurality of modules, at least a portion of said  
modules being adapted for movement between a server and client device of said network  
25 dynamically at run-time of an application based at least in part on the resources available in said  
client device.

53. (New) A distributed application architecture for use in a client-server network,  
comprising a distributed application having a plurality of modules, at least a first portion of said  
modules being adapted for movement between a server and client device of said network, at least

**Application No. : Unknown**  
**Filed : Herewith**

a second portion of said modules being restricted from movement between said server and client device based on peer locking.

54. (New) A distributed application for use on a cable network, comprising:

at least one server portion disposed on at least one of a plurality of servers of said

5 network, said at least one server portion comprising a plurality of modules;

at least one client portion disposed on at least one of a plurality of client devices of said network, said at least one client portion comprising at least one module;

at least one mutable module, said mutable module being adapted to run on either at least one of said plurality of servers or at least one of said plurality of client devices;

10 wherein said at least one mutable module is adapted to maintain at least one network partition.

55. (New) The distributed application of Claim 54, wherein the location of said at least one mutable module is determined at least in part by the resources of said at least one client device.

15 56. (New) The distributed application of Claim 54, further comprising at least one peer module having an interface, said interface preventing said peer module from being moved from said at least one server to said at least one client device.

57. (New) The distributed application of Claim 56, wherein said interface comprises an application programming interface (API).

20 58. (New) A distributed application adapted for operation on a client-server network, comprising:

at least one server portion adapted for operation on at least one server of said network;

a message protocol configured for interprocess communication;

at least one client portion adapted for operation on at least one client device of said

25 network, said at least one client portion being in data communication with said at least one server portion using at least said message protocol; and

at least one mutable module adapted for transmission from said at least one server to said at least one client device, said at least one mutable module comprising at least one vertical (client

**Application No. : Unknown**  
**Filed : Herewith**

server) partition and said at least one mutable module having the capacity of being in data communication with said at least one server portion using at least said message protocol.

59. (New) The distributed application of Claim 58, wherein said server portion and said client portion further comprise a plurality of modules having horizontal (peer) partitions.

5 60. (New) A method of optimizing the performance of a cable network comprising a plurality of servers, comprising:

providing a distributed application comprising at least one server portion, at least one client portion, and at least one mutable module, said at least one server portion being disposed on at least one of said servers and having at least one critical portion and at least one process  
10 thread running thereon;

receiving a plurality of processing requests from said at least one client portion or at least one mutable module at said at least one server portion;

arbitrating access to said at least one critical portion of said at least one server portion by said processing requests;

15 measuring the value of at least one parameter associated with said access of said at least one critical portion by said processing requests;

generating, based at least in part on said value, a new process thread; and processing at least one of said plurality of requests using said new process thread.

20